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THE RUINS OF CENTRAL AMERICA.

PART VIII.

As the work of clearing the palace goes on, we are continually meeting with new surprises. I have Stephens's plan before me, and find that it is altogether incorrect. Stephens had neither the time nor the force of laborers requisite for clearing the edifice, and Catherwood's sketches are correspondingly imperfect. Hence, the inexactness of his restorations. The Palace of Palenque, as it really is, will be reproduced in my plans and photographs.

I have completed my work at the Temple of Inscriptions, having made a cast of the last of the tablets. These casts represent upward of 236 square feet of most interesting bass-reliefs. I have also taken casts of bass-reliefs measuring 65 square feet in the so-called Temple of War. In the meantime, my Indian laborers continued the work of clearing the palace—or rather the several structures constituting the palace—of rubbish, and found in the principal court a front-face in high relief and of natural size. Hitherto, only profiles have been found at Palenque. This specimen probably belonged to the frieze of the interior façade of the palace, at the foot of which it was found; it gives proof of a quite unexpected wealth of decoration. I have, furthermore, photographed the lower half of the figure of a man, in high relief, natural size, to be seen in the frieze of the second building. The head is specially interesting, because it differs essentially from the profile heads carved on tablets in the palace, or seen in the friezes of the several buildings: the forehead is far less receding. The face is modeled in cement, or rather in almost pure lime; unfortunately, the Indian that discovered it drove his pick into one of the eyes.

A party of laborers employed by the Mexican Government, under the direction of Señor Rodriguez, an engineer, are making openings in different directions through the woods here, and are finding new buildings from day to day. But these buildings are identical in type with those already known and described. Some of the remains of sculptures, found by Rodriguez's men, I will describe later, when I shall have completed my photographs and casts.

While examining all the bass-reliefs on the columns of the palace and of the temples, I have found one in almost perfect condition that appears to have escaped the notice of Stephens; he does not reproduce one so perfect as this.

Following the lead of Stephens, I have searched for those superposed layers of plaster bearing inscriptions of which he writes, and have found such superposed layers in even greater numbers than he had led me to expect. I have counted as many as fifteen or twenty layers, one overlying another, and of different colors; for in this climate houses and monuments must be repeatedly coated with lime or paint, else they will become black. Still we cannot deduce from these coats of paint, however numerous they may be, any indication as to the age of the buildings, unless we can show that the ancient inhabitants were accustomed to whiten the walls of their palaces and temples at stated intervals, as every five, every ten, or every twenty years. The inscriptions, could we read them, would, perhaps, throw light on this matter. At all events, I will take away a specimen of the plaster with its several layers.

On January 16th, I made a discovery of considerable importance from its bearings on the question of the antiquity of these ruins. We are wont to estimate the age of a tree by the number of concentric rings exhibited by a cross-section of its trunk, and on this basis has been erected a theory to prove the very high antiquity of these Palenque ruins. Waldeck mentions giant trees growing out of the roofs of the temples, and which, according to him, must have stood fifteen hundred, two thousand, or even three thousand years. Señor Larrainzar shares the same opinion: he visited these ruins, and speaks of a mahogany trunk which showed seventeen hundred concentric rings. Now there are some trees of great size on the pyramids, rather than on the temples and palaces, but they are of the family *Ceiba*, which are of very rapid growth, so that the largest of them, measuring

from 80 inches to 118 inches in diameter, are not more than one hundred to one hundred and fifty years old. Señor Larrainzar, who, like his predecessors, was biased in favor of a remote antiquity for Palenque, inferred that, inasmuch as a tree was seventeen hundred years old, the ruins were not less than two thousand years. It was logical enough.

But Stephens upset this theory on finding trees from twenty-three to twenty-seven years old, and which, nevertheless, were from fifty-nine inches to ninety-three inches in diameter. The fact I am about to state affords a still more complete refutation of the theory.

Having cut down a sapling about an inch in diameter, I was very much surprised to observe in the cross-section a very great number of concentric rings: of these, I counted forty. Now, in this climate, this sapling, which is very heavy, and which appears to be of hard wood, cannot be more than eighteen months old. The inference would appear to be that in a region where there is no winter, and where, owing to the heat and moisture of the climate, Nature never rests, a concentric ring might be formed each month, each moon, or even oftener. I have laid aside two pieces of this sapling, to be submitted to the inspection of specialists. To-morrow I will cut down a number of saplings of different kinds, to satisfy myself that the fact I have observed is not anomalous.

January 17th.—We are still without laborers. This morning I cut down several young trees, from one to four inches in diameter, and found in all the same conditions I noted yesterday. I counted seventy concentric rings in one that was 1.77 inches in diameter, and upward of three hundred in a branch of a tree not over twenty years old. Hence, this "conclusive" evidence of the antiquity of the buildings at Palenque proves nothing. The observation I have made will probably be of great interest to naturalists. While waiting for a new force of laborers, I have again gone over the palace, and have discovered other inaccuracies in Stephens, which I will point out later.

I have studied the different pieces of ornamentation, some of which is very rich, as will appear from the sketches I send. The taste is thoroughly *rococo*, nor would it be disowned by the age of Louis XV. It is surprising that this exuberance should have made its appearance so early, for the taste for exaggerated ornamentation manifests itself only among nations that are effete and

in process of decay. As time went on this love of ornamentation grew steadily, till it reached its climax in Yucatan, the grave of the Toltecs. But so rapid is the march of events here that within the term of eleven centuries the Toltec nation passed through all those stages through which European nations have been passing for two thousand years or more.

We have found a very interesting fragment of a fallen cornice in the great court of the western palace. The outermost ornamentation of this piece of cornice is gone, yet the present surface is stamped with several hieroglyphics. Plainly either this people had an insane passion for inscribing their annals everywhere, or they must have employed old materials in the construction of their edifices, as did the builders of Babylon.

On the 18th of January, a force of fifteen laborers was sent to our assistance from the village of Palenque. I at once set them to work on the eastern façade of the palace, for hitherto that has been considered to be its front side. All previous writers have agreed in stating that a stair-way surrounded the edifice on every side; but when I was here in 1859, I photographed the eastern side, and showed that there a perpendicular wall took the place of the steps. The critics ridiculed me, and my photograph—a very imperfect one, I must admit. But now that I am clearing away all the rubbish from this façade of the palace, I find this wall, and in a better state of preservation than I expected. It extends along the entire façade. It is more than probable that the main entrance was on the north side, notwithstanding the position of the interior stair-way.

I have made casts of bass-reliefs, measuring in all eight hundred and sixty-one square feet. On the completion of this part of my labors, I made an excursion to the north of the palace, along a path cleared by our workmen. At the little rivulet I found a bridge in fair condition. As soon as the weather permits I will make a photograph of this interesting monument. In another excursion through the woods to the north-east of the palace, I everywhere found ruins and remains of buildings, all standing on pyramids. The number of these structures is enormous. Most of them present the same architectural arrangements we have found everywhere throughout Mexico, but generally they are smaller, their walls less thick, the arches of less elevation, and the compartments are all of small size. On this occasion I discovered two other bridges, one of

them a work of considerable magnitude. It is 32 feet wide and 32 feet in length. In all of these bridges we find the Toltec arch, produced by the gradual approximation to each other, from either side, of horizontal slabs of stone. It is probable that at the time when the ruins were inhabited and the country cultivated and cleared of timber, the rain-fall was less than it is to-day. Certainly the width of its arch is now insufficient for the body of water in the rivulet during the rainy season.

Still continuing our researches in the woods to the north of the palace, we found several other bridges and viaducts, one of the latter about 340 feet in length. The little rivulets were all canalized, as we see from the remains of the works found on every side, but now the streams are no longer confined within artificial barriers.

I have made a special study of the frieze of the palace overlooking the principal court, and I believe that I have collected sufficient data to give an idea of what it must have been in its best estate. Above the cornice is a frieze some seven and a half feet in depth, adorned with large figures, of one of which fortunately one-half remains, and from this we can, in some measure, infer the character of the others. The central door-way was surmounted by a still larger and monstrous figure, which reminds me of a similar figure that adorns a pyramid at Izamal. Each of the figures in the frieze was flanked by human figures in all sorts of postures, and along the top was a line of beautiful designs.

The stair-way of the palace was certainly on the north side. It must have been not less than 65 feet wide, but only faint traces of it now remain.

We have made excursions into the woods in every direction, discovering ruins everywhere, but these ruins are all of the same general class—temples and palaces. Nowhere have we found a structure which could pass for a dwelling. This is very singular, and it contradicts all experience. Here was a people apparently without any form of civil architecture.

Everything that I see here confirms me in the belief that Palenque was a *holy place*, a religious center, a city of pilgrimage, filled with temples and oratories. Thus only can we explain the fact that the historians of the conquest are silent about it. Had it been a great center of population it would undoubtedly

have figured in the annals of that time. Its vast floating population was scattered by the first muttering of the coming storm.

This place differs in many very important respects from all the Toltec or Yucatecan cities. In them we see other edifices besides temples and palaces; they possess public monuments such as are not to be found at Palenque—monuments on the walls of which are inscribed the acts of rulers, the exploits of warriors. In those other cities we find numerous roads, connecting the buildings with one another. Here we see nothing of this kind, and each structure seems isolated upon the elevation which it surmounts.

The belief that the purpose of these edifices was essentially a religious one, and that Palenque was a center of religion, gains confirmation from the character of the bass-reliefs. These present always the self-same action, namely, a man standing, and holding in his hand a scepter from which is emitted a flame, typifying speech—*preaching*. The kneeling personages accompanying this principal figure are neither slaves nor conquered enemies. I have studied them closely, and I am convinced that they are worshipers. Not one of the standing figures bears a weapon of any kind—no lance, no arrow, no sword.

One very curious fact I have discovered touching the method in which the artists worked. They first designed the figure of the personage, and *then put on the clothes*. Every piece of apparel, every article of ornament, was molded and laid on separately, as I have ascertained by breaking off certain portions of the vesture. In every case I found the body underneath carefully modeled.

In my wanderings through the forest I have found sundry edifices, which, for one reason or another, I have classed as tombs, places of sepulture, and, on superficial examination, have found human remains, vases, trinkets, etc. One of these groups of buildings I have examined more thoroughly than the others, and with the following results: Like all the other buildings of the same class, it is a very badly dilapidated ruin; but, entering with difficulty through a narrow opening, I found myself in one of a number of small chambers, filled almost to the ceiling with loose earth. For what purpose were they so filled? I set five men digging, and after a while we found a funeral-urn broken in pieces. The first chamber was cleared of earth, but the only

result was fragments of idols and a piece of bone. The broken urn was, in its form, absolutely identical with the urns found at Teotihuacan. One of the designs upon its side is an exact copy of a design found on a Toltec vase at Amecameca.

To determine the general plan of the city of Palenque would require the labor of five hundred men for six months, under the direction of a corps of topographers. Still I have, from my own researches, gathered data sufficient to give a more or less adequate idea of what the place was at its best. The city extended from north to south about one mile and a quarter, and about one mile and three quarters from east to west. In some localities, as in the region to the south of the palace, there stood groups of buildings of considerable size, and rather close to each other; in other quarters the buildings are far apart. The intervening spaces must have been occupied by the huts of the lower classes of the population. On the 10th of February we left the ruins of Palenque.

DÉSIRÉ CHARNAY.